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Docket No. 1745-003

A SYSTEM FOR DISPENSING VISCOUS MATERIALS

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This application is based on previous application ~~10/343,081~~ bearing date ~~10/27/2001~~.

BACKGROUND

This invention pertains generally to pressure actuated dispensers, applicators and devices for application of fluid materials, and more particularly to an apparatus which is part of a system which allows conventional dispensing devices to be adapted or modified such that a variety of materials in varying quantities may be dispensed from or applied by a single dispensing device.

Various types of dental materials are dispensed from some form of dispensing apparatus (Dragon 5,061,179). This may facilitate a more ergonomic action or in the case of dental composites, ease of placement. This placement may be enhanced visually by the apparatus or it may be used to overcome a drawback of the material itself. Such is the case with many of the light cured resins currently in use.

To increase strength, micron sized particles are incorporated into the resin such that when the composite is cured in the tooth, it is esthetically satisfactory and will be able to withstand the chewing forces. Today it is common to have filler content over 80%. Delivery of the material is commonly done with a hand actuated dispenser modified to magnify hand pressure as much as 5 times. Such dispensers are coupled with a cartridge filled with the appropriate material for the task. These cartridges usually are friction fit to the proximal end of the dispenser as a convenience factor. The cartridges are mostly uniform in their circumference, however their length may vary. The opening of the distal end contains a plug that when pushed along the